

## **Fishery Management Report No. 11-71**

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# **2012 Report to the Alaska Board of Fisheries on the Status of the Allocation of Enhanced Salmon in the Southeast Alaska Region**

by

**Flip Pryor**

December 2011

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



## Symbols and Abbreviations

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Weights and measures (metric)		General		Mathematics, statistics		
centimeter	cm	Alaska Administrative Code	AAC	all standard mathematical signs, symbols and abbreviations		
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H <sub>A</sub>	
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	<i>e</i>	
hectare	ha			catch per unit effort	CPUE	
kilogram	kg			coefficient of variation	CV	
kilometer	km	at	@	common test statistics	(F, t, $\chi^2$ , etc.)	
liter	L			confidence interval	CI	
meter	m			correlation coefficient		
milliliter	mL	compass directions:		(multiple)	R	
millimeter	mm	east	E	correlation coefficient (simple)	r	
Weights and measures (English)		north	N	covariance	cov	
	cubic feet per second	ft <sup>3</sup> /s	south	S	degree (angular )	°
	foot	ft	west	W	degrees of freedom	df
	gallon	gal	copyright	©	expected value	<i>E</i>
	inch	in	corporate suffixes:		greater than	>
	mile	mi	Company	Co.	greater than or equal to	≥
	nautical mile	nmi	Corporation	Corp.	harvest per unit effort	HPUE
	ounce	oz	Incorporated	Inc.	less than	<
	pound	lb	Limited	Ltd.	less than or equal to	≤
	quart	qt	District of Columbia	D.C.	logarithm (natural)	ln
yard	yd	et alii (and others)	et al.	logarithm (base 10)	log	
Time and temperature		et cetera (and so forth)	etc.	logarithm (specify base)	log <sub>2</sub> , etc.	
		exempli gratia		minute (angular)	'	
	day	d	(for example)	e.g.	not significant	NS
	degrees Celsius	°C	Federal Information Code	FIC	null hypothesis	H <sub>0</sub>
	degrees Fahrenheit	°F	id est (that is)	i.e.	percent	%
	degrees kelvin	K	latitude or longitude	lat. or long.	probability	P
	hour	h	monetary symbols		probability of a type I error	
	minute	min	(U.S.)	\$, ¢	(rejection of the null hypothesis when true)	$\alpha$
	second	s	months (tables and figures): first three letters	Jan,...,Dec	probability of a type II error	
	Physics and chemistry		registered trademark	®	(acceptance of the null hypothesis when false)	$\beta$
all atomic symbols			trademark	™	second (angular)	"
alternating current		AC	United States		standard deviation	SD
ampere		A	(adjective)	U.S.	standard error	SE
calorie		cal	United States of America (noun)	USA	variance	
direct current		DC	U.S.C.	United States Code	population	Var
hertz		Hz			sample	var
horsepower		hp				
hydrogen ion activity (negative log of)		pH				
parts per million		ppm	U.S. state	use two-letter abbreviations (e.g., AK, WA)		
parts per thousand	ppt, ‰					
volts	V					
watts	W					

***FISHERY MANAGEMENT REPORT NO. 11-71***

**2012 REPORT TO THE ALASKA BOARD OF FISHERIES ON THE  
STATUS OF THE ALLOCATION OF ENHANCED SALMON IN THE  
SOUTHEAST ALASKA REGION**

by

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December 2011

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## ABSTRACT

This report summarizes the development and implementation of the *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* (5 AAC 33.364), and the status of the allocation of enhanced fish among the three commercial gear groups in the Southeast Region: drift gillnet, seine, and troll through 2010.

Key words: Enhanced salmon, allocation, gillnet, seine, troll, chum salmon, king salmon, coho salmon, Alaska Board of Fisheries, Regional Planning Team, and Southeast Alaska.

## INTRODUCTION

This report summarizes the development and implementation of the *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* (5 AAC 33.364), and the status of the allocation of enhanced fish among the three commercial gear groups in the Southeast Region: drift gillnet, seine, and troll through 2010. At the present time, the allocation does not conform to recommended guidelines. The enhanced value to the drift gillnet fishery is above its allocation range, and the enhanced value to the purse seine and troll fisheries are below their allocation ranges. Two factors outside of regulatory control, marine survival and price paid to harvesters, have exerted substantial influence on the distribution of benefits from the enhancement program.

## BRIEF HISTORY OF THE ALLOCATION PLAN

In early 1991, the Alaska Board of Fisheries (board) asked the commercial harvesters of Southeast Alaska, through the two regional aquaculture associations, to develop a plan for the equitable sharing of the catch of enhanced salmon. The Southeast Allocation Task Force (SATF) was formed to draft a plan. The SATF consisted of voting members from the Northern Southeast Regional Aquaculture Association (NSRAA) and the Southern Southeast Regional Aquaculture Association (SSRAA), with equal representation from each association and from the three commercial gear groups. Nonvoting members included ADF&G staff, regional aquaculture association staff, and a representative from Douglas Island Pink and Chum, Inc., a non-association hatchery corporation. The allocation plan was developed through a lengthy public process, and in 1994, the board approved the plan, which is now regulation 5 AAC 33.364 (Appendix A). As set forth in board finding #94-02-FB (Appendix B), the Joint Northern Southeast and Southern Southeast Regional Planning Team (JRPT) reviews the status of the allocation of enhanced fish each spring and makes recommendations concerning enhanced salmon production to the commissioner. The JRPT also makes recommendations to the board concerning fisheries adjustments within special harvest areas that would help restore value allocations laid out in the *Southeast Alaska Area Enhanced Salmon Allocation Management Plan*.

## DESCRIPTION OF THE ALLOCATION PLAN

The *Southeastern Alaska Area Enhanced Salmon Allocation Management Plan* delineates percentage ranges of the commercial harvest *value* that should be realized by each commercial gear group. Recommended ranges are: seine, 44%–49%; hand and power troll, 27%–32%; and drift gillnet, 24%–29%. Harvest value is computed from: 1) the number of enhanced fish harvested by each commercial gear group, based primarily on marking or tagging programs reported by hatchery operators, and 2) average price per pound by gear type, computed by the Commercial Fisheries Entry Commission (CFEC). Allocation percentages are evaluated as five-year-rolling averages. If a gear group is out of its allocation range for three-consecutive five-year averages, some adjustment in production or harvest may be implemented to bring a gear group back into its range.

The Alaska Board of Fisheries Finding #94-02-FB is associated with the allocation management plan. It provides a detailed explanation of the plan development process, the *Report of the Southeast Alaska Allocation Task Force for Enhanced Salmon*, and contains flexible guidelines for plan implementation.

## MECHANISMS FOR CORRECTION

The tools for making adjustments to the distribution of the harvest, in order to achieve allocation percentage targets are: 1) special harvest area (SHA) and/or terminal harvest area (THA) management adjustments, 2) new enhanced salmon production, and 3) modification of enhancement project production, including remote releases (Guideline #13 in Finding #94-02-FB). Special harvest area management adjustments can be used for short-term corrections. New production or modification of existing projects are remedies for the long term, and can be initiated by enhancement organizations requesting changes or by the JRPT making recommendations to the commissioner.

## THE STATUS OF ALLOCATION

The status of the allocation of enhanced fish through 2010 is shown in Figure 1. The data used to create this figure is the best available data at this time, and does include preliminary 2010 data. Private nonprofit (PNP) operators will finalize 2010 fish numbers with updates in their 2011 annual reports. Finalized 2010 allocation values and preliminary 2011 allocation values will not be available until they are presented to the JRPT in April 2012. The five-year rolling-average for all three gear groups has been out of their target ranges for more than three years. The five-year average seine harvest value has been below its target range since 2005. The five-year average troll harvest value has been below its target range since 1995. The five-year average gillnet harvest value has been over its target range since 2004.

## **FACTORS AFFECTING THE ALLOCATION OF ENHANCED FISH**

It became apparent with the preliminary 1997 numbers that an imbalance in the allocation had developed. Early in 1998, the JRPT conducted an in-depth analysis of the factors that led to the imbalance in order to recommend the most effective changes. Department staff constructed a series of graphs showing trends in harvest, price per pound, marine survival, and hatchery releases for the species most important to the troll fleet (king and coho salmon) and to the seine fleet (chum salmon). These graphs have been updated each year and appear as figures 2–13 of this report. Trend lines on the graphs are three point polynomials. All data for these tables are from the ADF&G statewide hatchery data base, with the exception of marine survival, which was provided by NSRAA, SSRAA, and DIPAC. King and coho salmon marine survivals do not typically differ greatly from release site to release site, so the entire production of each operator is shown on one graph. Chum salmon marine survivals can vary greatly between release sites. Each operator was given its own graph to show variation in marine survivals from different release sites, within the same brood year.

### **COHO SALMON**

The 2010 coho salmon value of \$1.30/pound is up from the most recent ten-year average price of \$0.99/pound (Figure 2). The 2010 troll harvest of enhanced coho salmon is 271,760 fish, which is below the most recent ten-year average of 280,048 fish. Releases of coho salmon have shown a gradual, but consistent, increase; the 2010 release of just fewer than 20 million coho salmon (brood year 2008) is an increase above the recent ten-year average of 15.8 million fish (Figure 3). The marine survivals for coho salmon, provided by the operators, are shown in Figure 4. The graph shows that survivals at each facility can vary greatly from year to year and that survivals between facilities can vary greatly within the same year.

### **KING SALMON**

The 2010 king salmon value of \$4.39/pound is up from the most recent ten-year average of \$2.66/pound (Figure 5). The 2010 troll harvest rate of 20,480 enhanced king salmon is below the recent ten-year average of 26,556 enhanced king salmon. The 2010 release of 8.9 million king salmon is a slight increase above the ten-year average of 8.1 million (Figure 6). Recent increases in king salmon production can be attributed to increased use of zero-check programs. Zero-check programs allow release of king salmon smolts without the traditional fish culture practice of a full year of freshwater rearing. Marine survivals, provided by the operators, are shown in Figure 7. The graph shows that survivals at each facility can vary greatly from year to year and that survivals between facilities can vary greatly within the same year.

### **CHUM SALMON**

The 2010 seine harvest of 2.4 million enhanced chum salmon is slightly below the recent ten-year average of 2.9 million enhanced chum salmon, and is significantly below the 1995–2000 average of 5.9 million enhanced chum salmon (Figure 8). The increase in harvest in the late 1990s more than compensated for a 40% decline in price over the same period, resulting in a high economic return to the seine fleet. The 2007 release of 452 million chum salmon fry is up from the previous ten-year average of 368 million (Figure 9). Marine survivals, provided by the

operators, are shown in Figures 10, 11, and 12. All three figures demonstrate there can be vastly different marine survivals at different release sites, within the same brood year.

The troll fleet has shown that it can effectively target chum salmon. The troll fleet had over a million dollars of exvessel value of troll-caught enhanced chum salmon in 1993, 2000, 2001, and 2009 (Figure 13). In 2010, the exvessel value of troll-caught enhanced chum salmon was just below 2.5 million dollars. The most recent ten-year average of troll-caught enhanced chum salmon is 685 thousand dollars.

Recent trends in marine survival of chum salmon have had an impact on allocation. Strong survivals of DIPAC-produced fish in Lynn Canal have benefited the gillnet fleet, while an overall drop in survivals at Hidden Falls and Neets Bay have negatively affected the seine fleet.

## **SOCKEYE SALMON**

Enhanced sockeye salmon production in Southeast Alaska is limited compared to king, coho, and chum salmon production. The two producers of sockeye salmon are DIPAC's Snettisham Hatchery and SSRAA's Burnett Inlet Hatchery. The most recent ten-year average of enhanced sockeye salmon value is 930 thousand dollars. The gillnet fleet harvests the majority of these fish, with a recent ten-year average of 753 thousand dollars.

## **PINK SALMON**

Enhanced pink salmon production in Southeast Alaska is limited compared to king, coho, and chum salmon production. The two producers of pink salmon are Armstrong-Keta's Port Armstrong Hatchery and Kake Nonprofit Fisheries Corporation's Gunnuk Creek Hatchery. The most recent ten-year average of enhanced pink salmon value is 349 thousand dollars. The seine fleet harvests almost all of these fish, but because there is not an otolith recovery program in place, the value to the seine fleet is estimated as a percentage of the hatchery return.

## **ACTIONS TAKEN BY THE JOINT REGIONAL PLANNING TEAM**

The allocation plan is an effort to provide for a fair and reasonable distribution of enhanced salmon harvests among the commercial user groups. Two of the most influential factors affecting allocation are marine survival and price per pound, which are factors outside the control of the associations, the department, and the board. The JRPT recognizes these influences as a major determining factor for value allocation, but nonetheless strives to consider the board's allocation guidelines when making recommendations for changes in harvest opportunity or harvest production. The allocation plan and associated findings of the board do not *require* the board to make changes in access, or the JRPT to recommend changes in production whenever an imbalance occurs

Allocation plan oversight is one of the major responsibilities of the JRPT. JRPT meetings provide a forum to discuss hatchery production changes, and possible modifications of the harvest of enhanced fish to address the allocation imbalance. The JRPT is composed of northern Southeast and southern Southeast representatives of each commercial gear group who have been selected by the boards of each respective regional aquaculture association. JRPT recommendations are made as a result of discussions by the affected parties, with additional public input considered during open public meetings. ADF&G staff on the JRPT provide

technical support and participate in discussions, but do not vote on issues that have direct allocative implications. The intent of the allocation plan has always been to try and increase targeted production and/or harvest opportunity of the gear group below its allocation range using measures that do not significantly and directly penalize historical harvest opportunities of the gear group that is above its target range. Because the allocation is relational, a percentage increase in one gear group value will mean a corresponding decrease in one or both of the other two gear groups (i.e.,  $A+B+C=100\%$ . If A increases, then (B+C) must decrease by the same amount as the increase of A).

The Joint RPT has recommended to the commissioner that hatcheries continue to increase king, coho, and chum salmon production, where possible. The inherent risk of adjusting production to correct an imbalance is the lag time from egg takes to harvest, especially for king and chum salmon. A decision to modify production numbers in a given brood year will take four years before the majority of fish return for chum salmon, and five years for king salmon. Generally, increases in production have a positive economic impact from additional harvests. However, it is possible that increased production may not improve the allocation imbalance for the target gear type, and potentially, a decision to *increase* production results in little or no increased harvest value, if survivals and prices decline. A decision to *decrease* production that might restore the allocation imbalance, but may also result in major negative economic impacts on a gear group and decreased economic activity.

Overall increases in king and coho salmon releases, as well as changes in harvest management, have been a positive step to increasing troll allocation. If future marine survivals and exvessel prices do not adversely override the increase in production, the value of the troll harvest should increase. It is important to note, however, that the value of king and coho salmon have increased dramatically in terminal “clean-up” fisheries for all the gear groups. Increased restraints imposed by the Pacific Salmon Treaty have limited the amount of fishing time for the troll fleet, which reduces troll catch and allows more fish to return to terminal areas. In essence, projects specifically designed to help the troll fleet may be working against the allocation imbalance by providing significant value to the seine and gillnet fleets in the terminal areas. These projects do raise the value of the troll harvest, but do not necessarily raise the allocation portion based on value. For example, a project intended to increase the troll allocation value by producing additional king salmon may increase the troll catch of king salmon harvested during directed fishing periods. However, depending on the U.S. king salmon harvest ceiling and troll allocation, only a few days of directed troll harvest may be allowed, and the majority of the production returns to the terminal release site where harvest by net gear is provided. Production changes are long-term and the final effects on allocation are not always predictable.

During the 1999/2000 board cycle, the JRPT submitted two proposals, which were adopted by the board, intended to increase opportunity for the troll fleet to harvest enhanced king, coho, and chum salmon. The first proposal eliminated the chum salmon cap during the spring king salmon fishery at Hidden Falls. The second proposal allowed the department to extend the length of the weekly Snow Passage spring fishery based on enhanced coho salmon harvest. While both of these proposals may have increased value to the troll fleet, neither proposal has had a significant impact on allocation percentages.

During the 2008/2009 board cycle, the JRPT submitted a proposal, which was adopted by the board, to change from a 2:1 to a 1:1 ratio for gillnet and seine openings in the Deep Inlet THA for 2009, 2010, and 2011. Also during the 2008/2009 board cycle, the JRPT submitted the

“Industry Consensus 12/9/08” letter as a record copy to the board. The industry consensus letter was a recommendation from the industry members who were present at the fall 2008 RPT meeting, was unanimously approved by the JRPT, and included a list of both long-term suggestions (mostly increases in production) and short-term suggestions (mostly recommendations on board proposals) for how to address allocation imbalances. The board accepted the industry consensus letter and followed the guidelines regarding enhanced salmon allocation proposals. The proposals adopted by the board had some impact on the allocation percentages, but not enough to solve the imbalance. The long-term solutions of increased production mentioned in the letter will not show increases in harvest until the 2014/2015 board cycle.

For the current 2011/2012 board cycle, the JRPT submitted two proposals; a proposal to continue the 1:1 time ratio for gillnet and seine openings in the Deep Inlet THA through 2017 (proposal 335), and a proposal to continue a 1:1 time ratio for gillnet and seine openings at the Anita Bay THA through 2017 (proposal 334). The JRPT is also again submitting an “Industry Consensus 12/8/11” (Appendix C) which was written by industry representatives and unanimously supported by the JRPT at its December 8, 2011 meeting in Sitka.

The letter makes the following recommendations to the board:

- 1) United Southeast Alaska Gillnetters will formally withdraw support of the following USAG proposals and asks the board take no action on proposals 289, 296, 297, 298, 323, 324, and 333;
- 2) Southeast Alaska Seiners will formally withdraw support of the following SEAS proposals and asks the board take no action on proposals 290, 291, 295, 332, and 336;
- 3) That the board takes no action on proposal 308; the individual who submitted the proposal will formally withdraw support of the proposal;
- 4) That the board support proposals 325, 334, 335, and 343 with the suggested amendments;
- 5) That although the JRPT does not take a position on proposal 331, the JRPT suggested an amendment to regulation if the proposal is not adopted.
- 6) That the board support proposals 311, 315, 338, 340, and 344.

## **FIGURES**

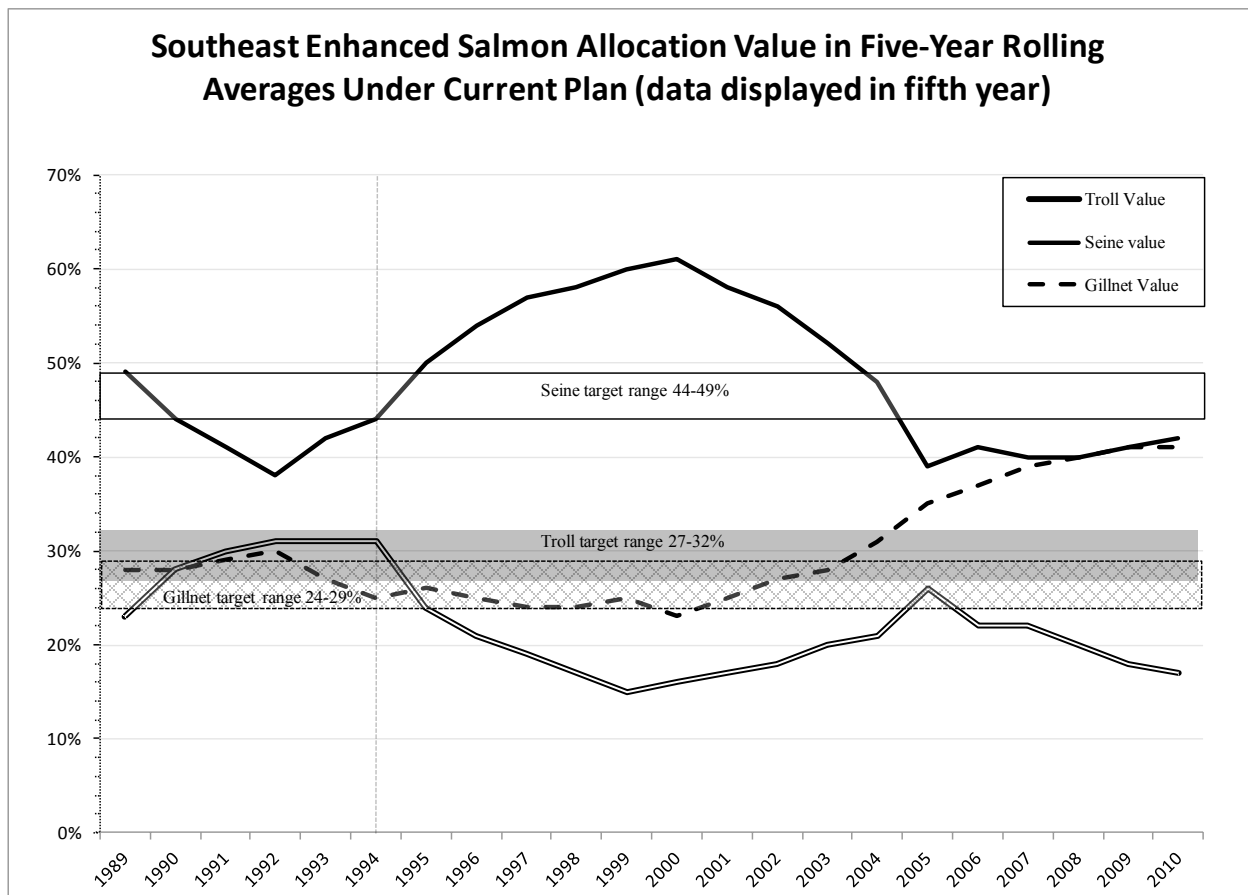


Figure 1.—Southeast enhanced salmon allocation value in five-year-rolling averages through 2010 (data points are displayed in the fifth year of each five-year-rolling average).

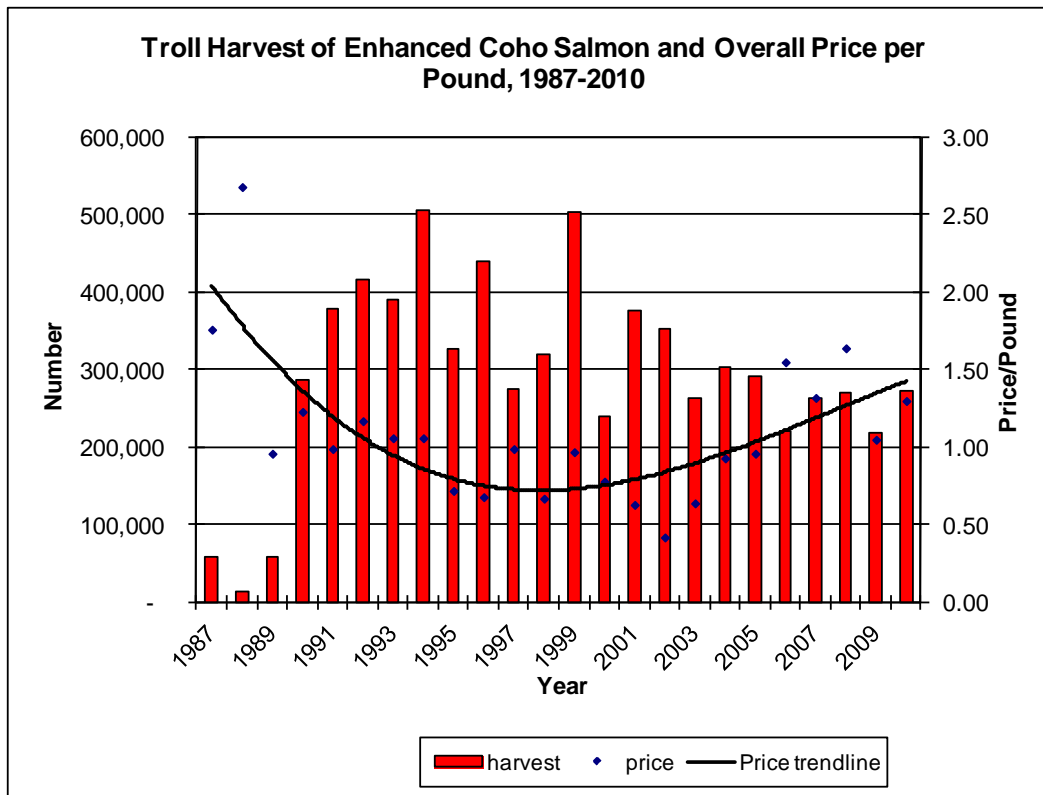


Figure 2.—Troll harvest of enhanced coho salmon and overall price per pound 1987–2010.

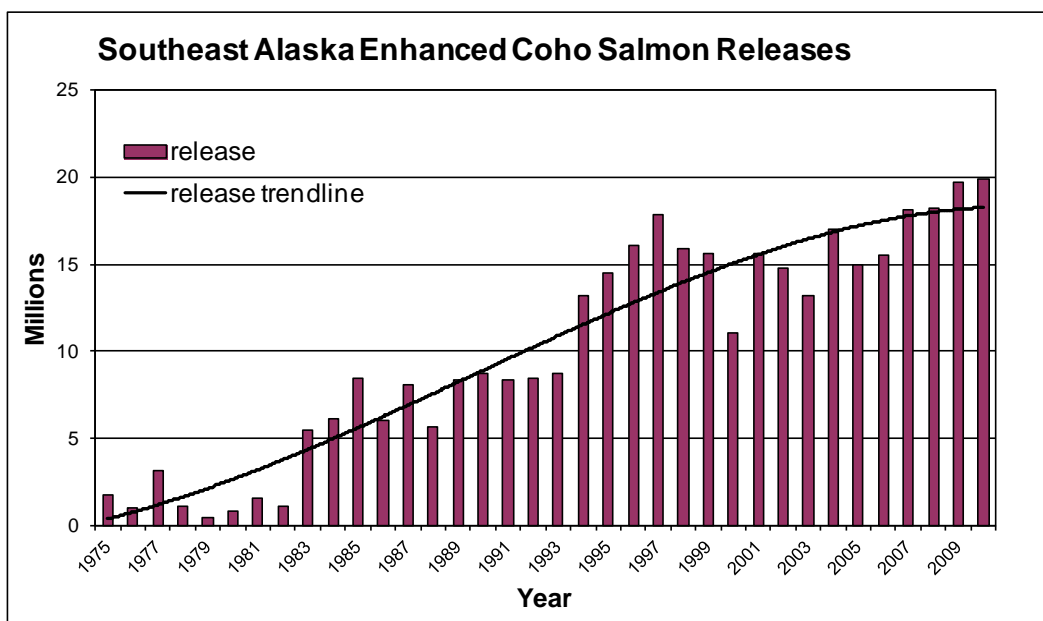


Figure 3.—Southeast Alaska enhanced coho salmon releases, 1975–2010.

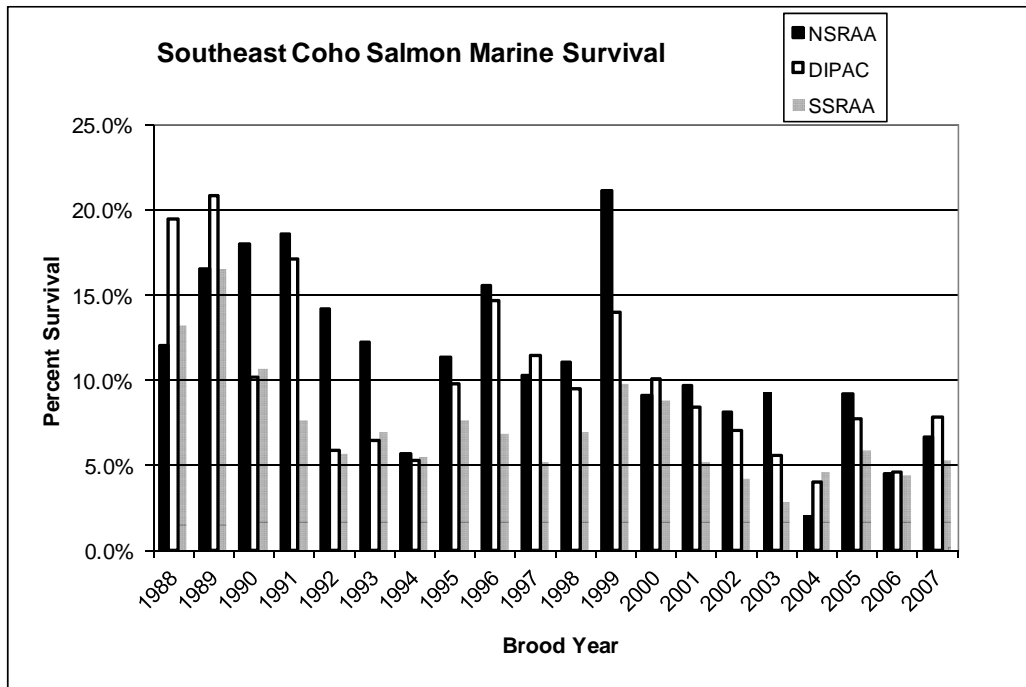


Figure 4.—Southeast Alaska coho salmon marine survivals for brood years 1988–2007.

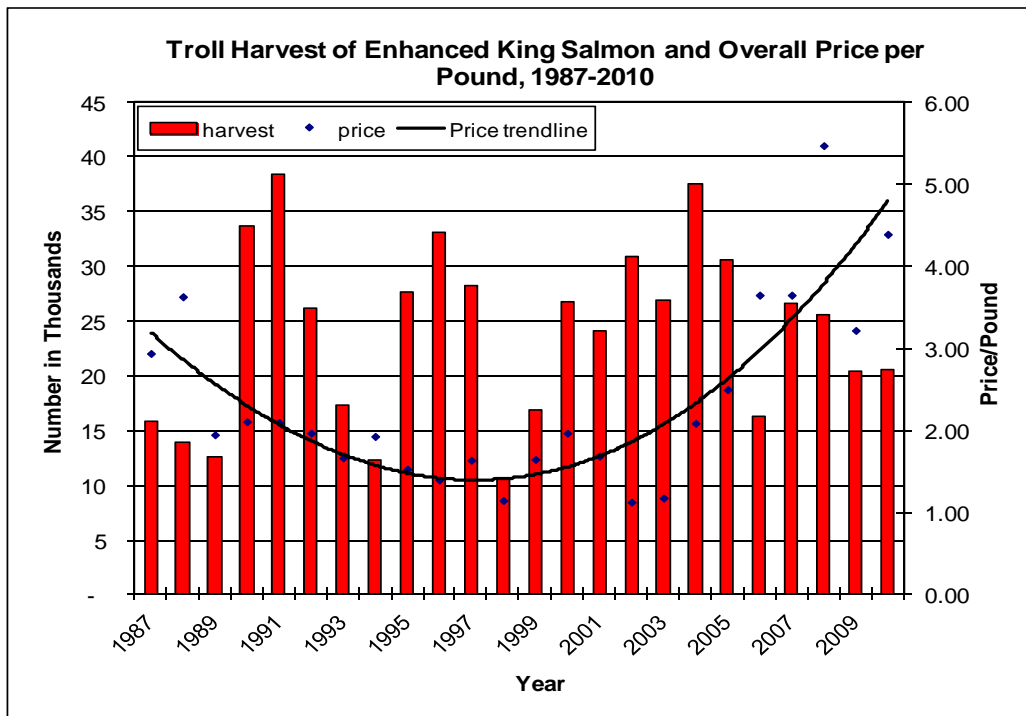


Figure 5.—Troll harvest of enhanced king salmon and overall price per pound, 1987–2010.

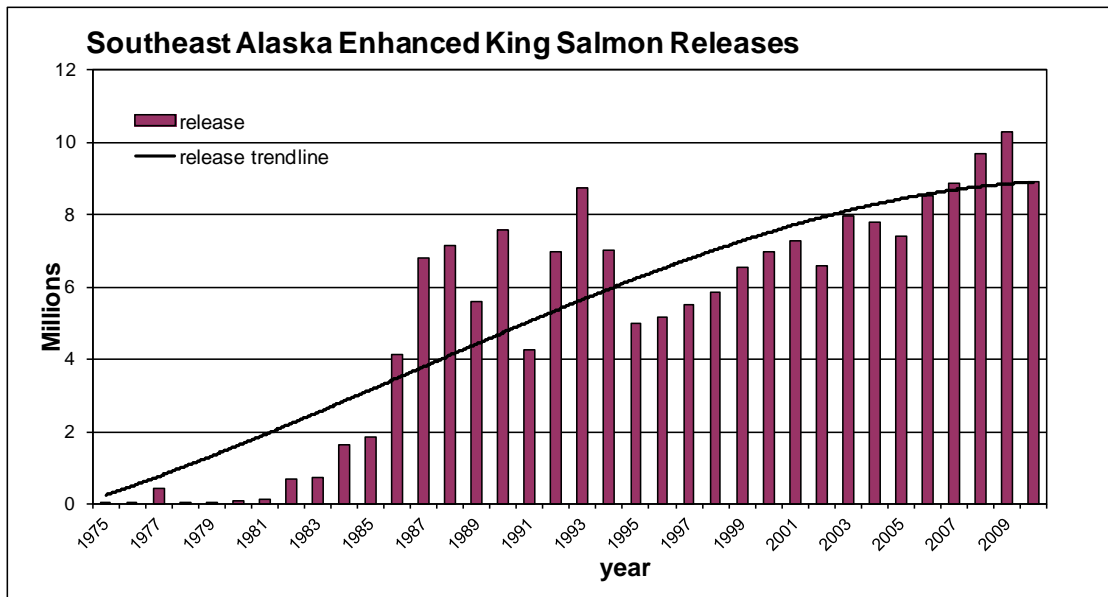


Figure 6.—Southeast Alaska enhanced king salmon releases, 1975–2010.

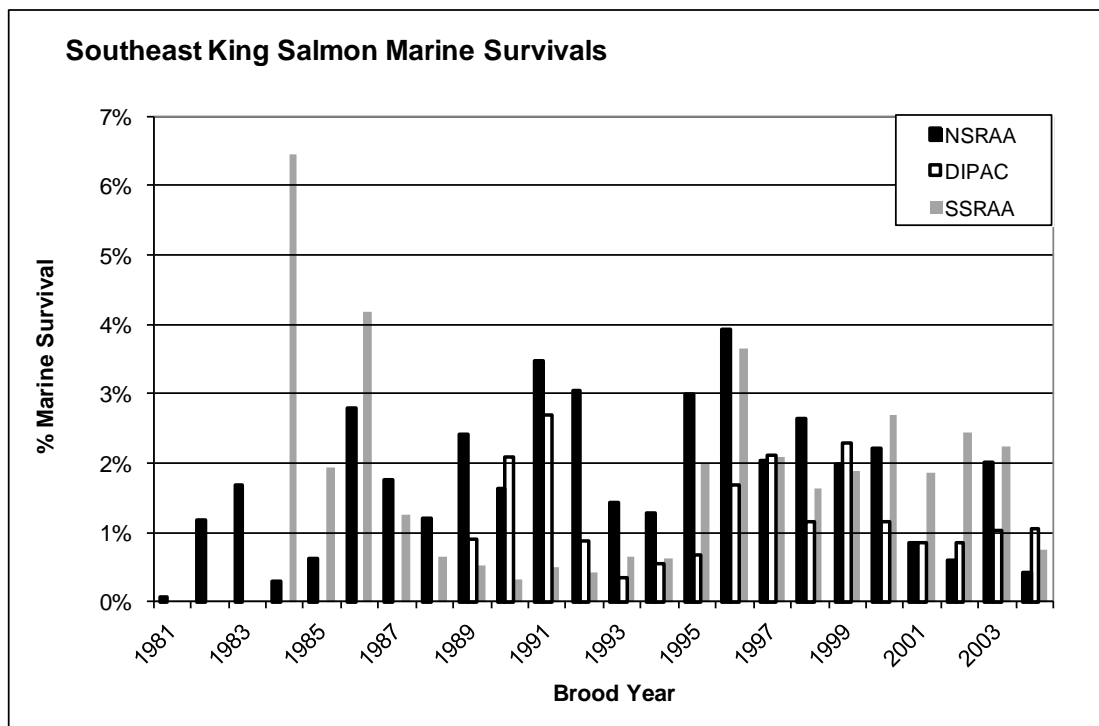


Figure 7.—Southeast Alaska enhanced king salmon marine survivals for brood years 1981–2004.

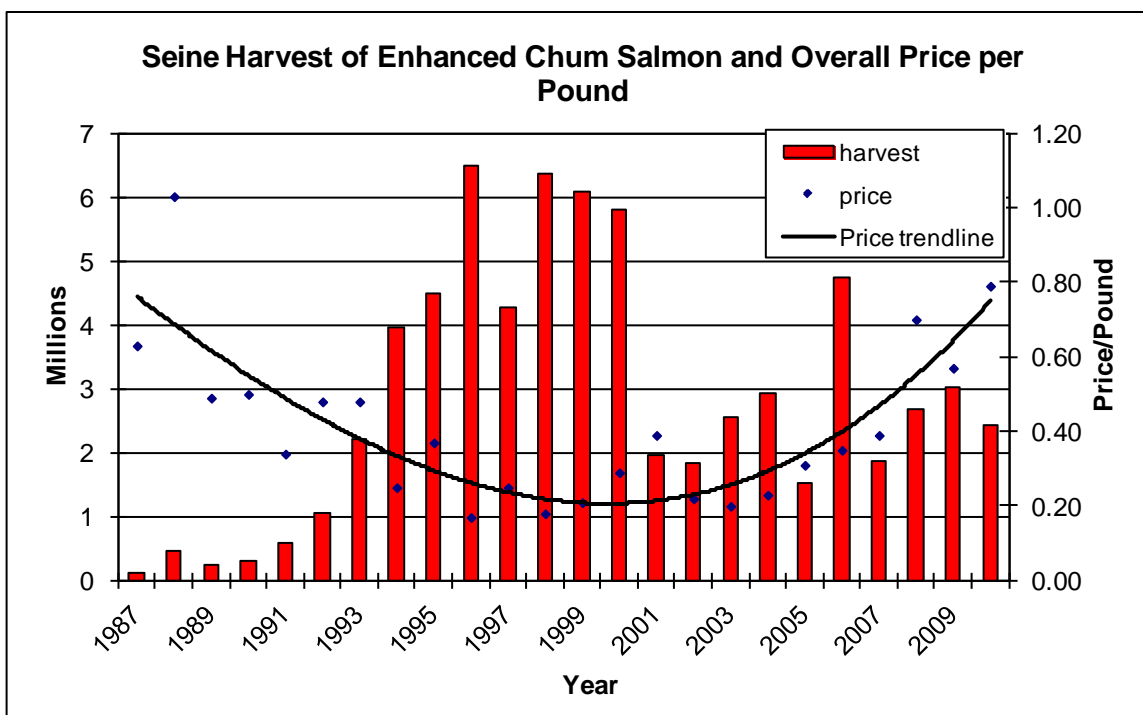


Figure 8.—Seine harvest of enhanced chum salmon and overall price per pound, 1987–2010.

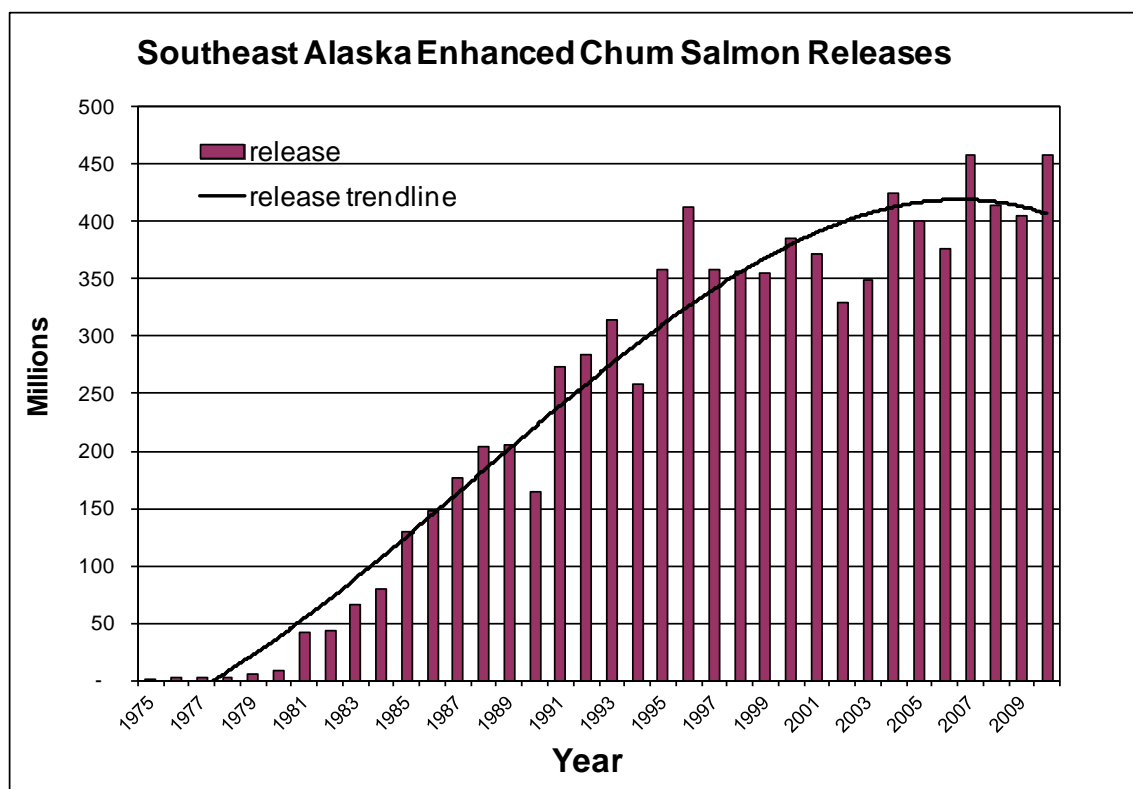


Figure 9.—Southeast Alaska enhanced chum salmon releases, 1975–2010.

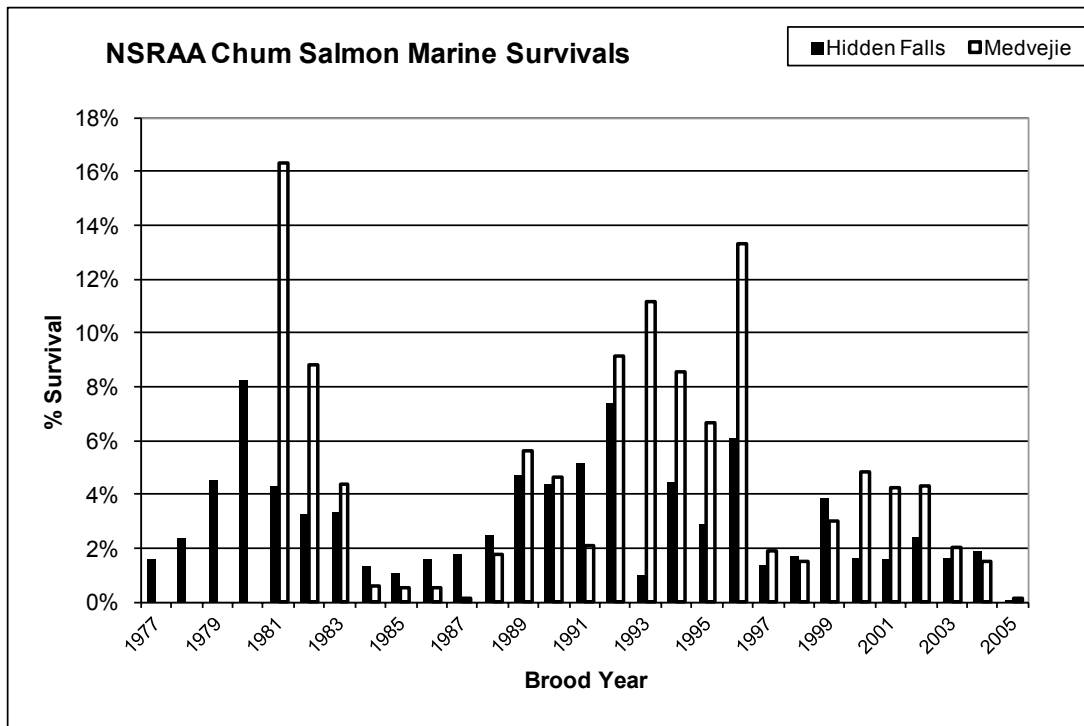


Figure 10.—Northern Southeast Regional Aquaculture Association chum salmon marine survivals for brood years 1977–2005.

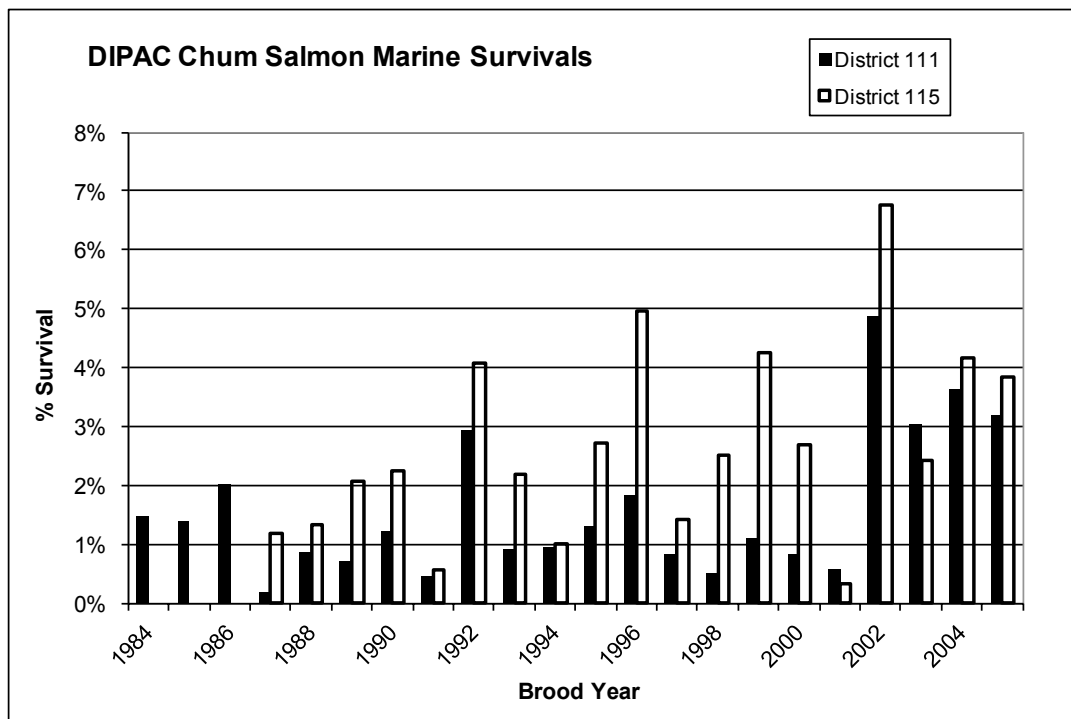


Figure 11.—Douglas Island Pink and Chum, Inc. chum salmon marine survivals for brood years 1984–2005.

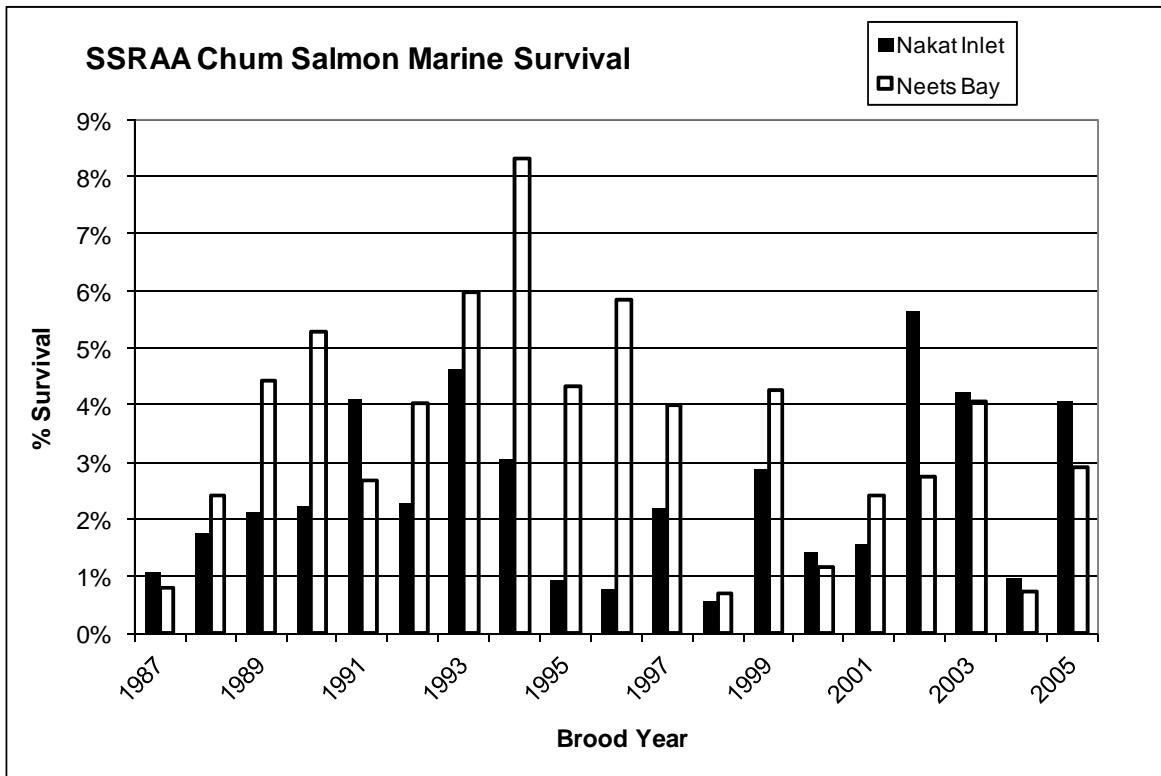


Figure 12.—Southern Southeast Regional Aquaculture Association chum salmon marine survivals for brood years 1987–2005.

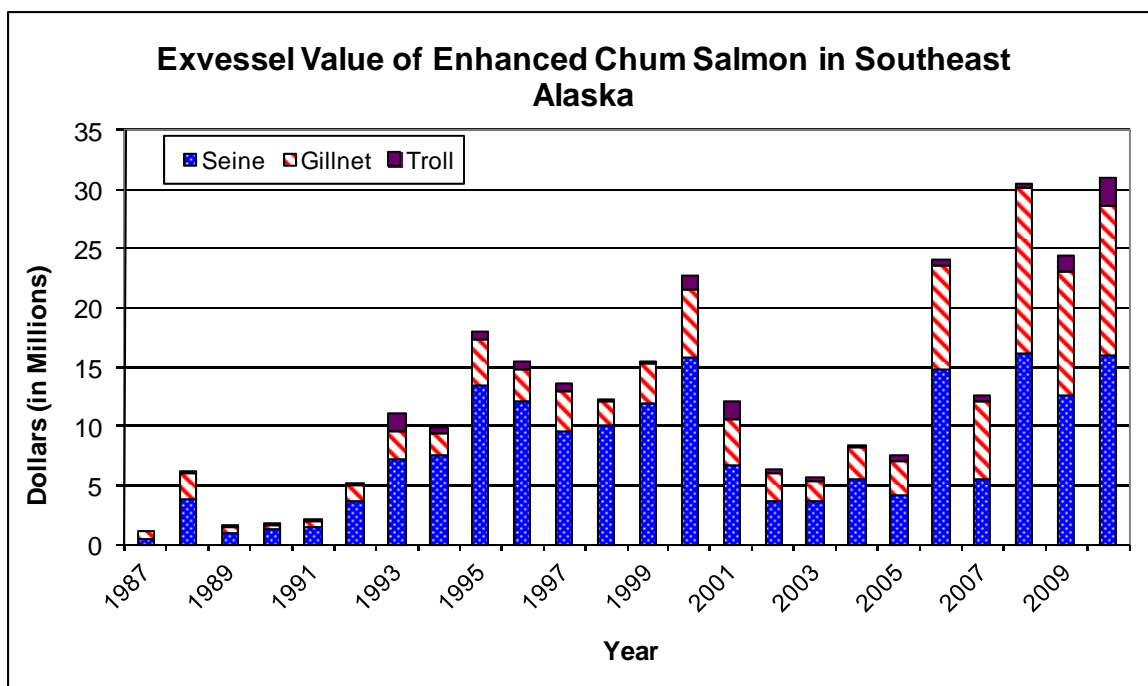


Figure 13.—Exvessel value of enhanced chum salmon in the Southeast Region, 1987–2010.

## **APPENDICES**

(a) The purpose of the management plan contained in this section is to provide a fair and reasonable distribution of the harvest of salmon from enhancement projects among seine, troll, and drift gillnet commercial fisheries, and to reduce conflicts among these users, in the Southeastern Alaska Area. The Board of Fisheries establishes the following value allocations:

- (1) seine – 44 percent to 49 percent;
- (2) hand and power troll – 27 percent to 32 percent;
- (3) drift gillnet – 24 percent to 29 percent.

(b) The department shall evaluate the annual harvest of salmon stocks from enhancement projects to determine whether the distribution of the value of enhanced salmon taken in the seine, troll, and drift gillnet fisheries in the Southeastern Alaska Area is consistent with the allocation established in (a) of this section. The evaluation of allocation percentages shall be based on five-year increments, beginning with 1985. The value of the enhanced salmon harvested each year shall be determined by the department based on data from the Commercial Fisheries Entry Commission.

(c) If the value of the harvest of enhanced salmon stocks by a gear group listed in (a) of the this section is outside of its allocation percentages for three consecutive years, the board will, in its discretion, adjust fisheries within special harvest areas to bring the gear group within its allocation percentage.

(d) The department may not make inseason adjustments or changes in management in or out of the special harvest areas to achieve the allocation percentages established in (a) of this section.

(Eff. 5/29/94, Register 130)

Authority: AS 16.05.251 AS 16.05.730 AS 16.10.440

**Southeastern Alaska Area Enhanced Salmon Allocation Management Plan (5 AAC 33.364)**

**Background:** In March 1991 Mike Martin, Chairman of the Board of Fisheries, asked the Northern Southeast Regional Aquaculture Association (NSRAA) and the Southern Southeast Regional Aquaculture Association (SSRAA) to coordinate the development of the southeast wide allocation plan for all enhanced salmon.

The issue concerned the benefits of commercial fishermen received from the enhancement activities especially in relation to the amount of the 3% Salmon Enhancement Tax (SET) paid. The issue was different between the Regional Associations and could not be resolved. Numerous proposals have been submitted to the Board of Fisheries to resolve the issue but none were acted upon. Chairman Martin requested that the two Regional Associations consider an all Southeast Alaska Allocation Plan to include all enhancement activities: Fish and Game FRED division, Independent Non-profit Aquaculture corporations; and Regional Aquaculture Associations.

The Board of Directors of NSRAA and SSRAA agreed to accept the challenge. They formed a group that first met on March 29, 1991 in Ketchikan. The group called itself the Southeast Allocation Task Force (SATF). The SATF is composed of six voting members, three each from NSRAA and SSRAA, and each association provided one seiner, one troller, and one gillnetter for a total of two people from each gear type on SATF. All decisions were by consensus. No meeting was held without six voting members present.

There were two non-voting members on the SATF, one each from the FRED Division and a representative from the independent non-profit aquaculture corporations. DIPAC represented the independent seat. Also, each Regional Association provided on staff member. Pete Esquiro represented NSRAA and Don Amend represented SSRAA. The staff and non-voting members are resource people who provided technical input and comments when appropriate. The SATF also has had technical input from the NMFS at Auke Bay, the limited entry commission, and other people as needed.

All meetings were publicly held. Announcements were made southeast wide in newspapers and radios. Public attendance was minimal, but a few showed up at each meeting. These people were allowed to address the SATF as recognized by the chair. There were no appointed sport representative, but these interests were present at a few meetings. There was a total of five meetings.

The SATF developed the number of fish caught and this was reviewed by scientists at the Auke Bay Laboratory. The value of the fish was provided by the Limited Entry Commission. The data does not include enhancement activities by the National Marine Fisheries Service (NMFS), Metlakatla Indian Community (MIC) on Annette Island, or the U.S. Forest Service (USFS). The production at NMFS is small and experimental. Although the production by the MIC is significant and they also harvest Alaska enhanced fish, this was not included because their harvest and production cannot be controlled by the State. The USFS conducts many habitat enhancement activities, but the numbers cannot be verified or evaluated. All of S.E. Alaska was included (Districts 1–15), but the Yakutat area was excluded.

The base period for data analysis was 1985. Production prior to 1985 was not significant and most projects were just coming on line. The data was evaluated through 1990 and will be updated annually as it becomes available. Averages were based on this period when production was still increasing and changing. Estimates were made based upon all currently permitted capacity when at full production. Future production was based on planned increases in capacity, but not yet permitted or operational.

The development of the agreement was based on catches by power and hand trollers, purse seiners, and drift gillnetters. Set nets were not included and are not used in the areas analyzed. Sport, sport charter, subsistence, and personal use were not included. The agreement was based only upon those who pay the 3% SET. No allocation was suggested for these other groups. The belief was that they are restricted by bag limits and an allocation of enhanced fish is inappropriate.

The guidelines will be submitted to the Board of Fisheries and may be set in regulation, or developed into policy. The guidelines will be used by the Regional Planning Teams (RPTs) as one element in the evaluation of permit requests and proposed production changes. The Commissioner of Fish and Game will consider the guidelines when evaluating permits or establishing special harvest areas. The Commissioner of Commerce of Economic Development will consider them in determining salmon enhancement loans for changes in production. The Board of Fisheries will use it to make decisions concerning gear group disagreements that involve enhanced fish production. The guidelines are viewed as goals to achieve and remain flexible for changing conditions, such as management changes, treaty changes, gear changes, legislative changes, etc. It was not intended for Fish and Game management to use in managing the common property fishery, except in a very few special instances.

#### REPORT OF THE SOUTHEAST ALASKA ALLOCATION TASK FORCE (SATF) FOR ENHANCED SALMON.

Following are the fourteen (14) guiding principles which were developed along with rationale statements of each:

- 1) The primary goal of the Southeast Alaska salmon enhancement program is to provide additional fishing opportunities and revenue to traditional common property fisheries.
  - (A) Performance Goals: Hatchery program plans and performance, over time, should provide a 70% contribution (after broodstock) to common property fisheries. Out of recognition for those hatcheries not receiving any salmon enhancement tax (SET) revenues, a 60% contribution (after broodstock) to common property fisheries is an acceptable goal. This goal should be expanded to 70% when these non-association hatcheries retire their existing debt obligation to the State of Alaska.
  - (B) Operators of hatcheries and other enhancement projects will use these performance goals in designing the annual management plans they submit to the joint Regional Planning Team (RPT) for review prior to approval by the Commissioner.
  - (C) It is recommended that enhancement programs that achieve these performance goals be given priority from the Dept. of Commerce and Economic Development on the requests for funding from the Fisheries Enhancement Revolving Loan Fund.
  - (D) Common property fisheries means those fisheries available to the people for common use.

**Rationale:** The enhancement programs are primarily for the benefit of the common property fishery and not for the benefit of private and state ownership. To assure the emphasis is on the common property fisheries, the 70% and 60% performance goals specified in 1A shall be used in evaluating projects. Although contributions to the common property fisheries will vary from year to year depending on run strength, survival rates and management, the long term benefit must be to the common property fisheries. No penalty for failures is suggested. However, hatchery proformas should include these production goals and, if not achieved over time, it is intended that management changes be made to assure these goals.

Broodstock are not included because they were viewed the same as escapement goals. Broodstock do not financially benefit anyone directly and are essential for continued production (see number 3).

- 2) Management of traditional “wildstock” fisheries are not to be restricted by cost recovery needs (economic escapement) of hatcheries.

**Rationale:** This concept is embodied in Alaska Statutes (AS 16.05.730). The SATF could not envision any circumstance where a wildstock fishery should be interrupted to assure a cost recovery harvest.

- 3) Restrictions on conduct of traditional “wildstock” fisheries to meet broodstock needs should be absolutely minimal and should be clearly documented by adequate production and harvest data. Protection of broodstock should only occur in close proximity to terminal areas. (Consistent with AS 16.05.730, and regulations 5 AAC 40.005 and 5 AAC 40.220).

**Rationale:** The SATF recognizes the importance of broodstock. However, broodstock alone should not drive a common property fishery. Protection of broodstock should only occur in close proximity to terminal areas and only when the wildstocks can be adequately harvested in another area. The need for protection of broodstock in any area must be documented by showing that broodstock goals are adversely affected and the area contains significant broodstock. However, it is not intended that an operator manipulate activities just to ask for broodstock protection. For example, by conducting cost recovery harvest without taking proper steps to assure broodstock collection.

- 4) Enhancement projects should include tagging or marking that will allow determination of the amount of production harvested in the various fisheries.

**Rationale:** It is recommended that adequate tagging programs be required under the Commissioner's authority (AS 16.10.400). Operator estimates are not adequate for estimating contribution to common property fisheries. Tagging or marking programs are essential; however, because the technology for marking fish is still evolving, no method is recommended. It is assumed that the most reliable and cost effective method will be used.

- 5) The State of Alaska should commit to an adequate mark recovery program for all enhanced salmon to provide harvest and production data.

**Rationale:** It is recommended that those responsible for enhancing fish should pay for the marking, but only the state has the resources to conduct the tag recovery program. The allocation agreement will not work unless the state commits to a mark recovery program. Also, there was evidence that the tag recovery program will not be conducted equally among the gear types or species harvested. For example, troll Chinook fisheries have been more intensively sampled, while the seine harvest has been sampled the least of the groups. The tag recovery program should be designed to provide an equal level of confidence in the contribution of enhanced salmon to each gear type.

- 6) Habitat enhancement and restoration projects where marking is not feasible will not be counted. Other field projects where marking is feasible and economically acceptable will be counted.

**Rationale:** Lake fry plants, stream bioenhancement, stream rehabilitation, and other enhancement strategies are frequently conducted with small numbers of fish in remote areas. It may not be practical or economically feasible to mark the fish. These enhancement and restoration projects are encouraged and it is recognized that they contribute to the common property fisheries, but they will not be counted in the allocation percentages. However, where feasible, marking should be conducted.

- 7) The allocation percentage goals will be used to provide a fixed target for production.

**Rationale:** Enhancement projects and production goals have frequently been established based on political expediency or the economic viability of the operator. However, whenever fish are released and the returning adults harvested, an allocation is made. The allocation can become disproportionate based on the number of fish and where they are released.

It is desirable that new production, or revised existing production contribute to achieving the allocation percentage goals established. This however, should not be the only criteria used to judge the desirability of new or revised production. If such new or revised production is “projected” to unbalance the distribution of enhanced salmon, and the change in production is otherwise considered desirable, the RPT will evaluate the overall enhancement program to determine what adjustments may be necessary to bring distribution of the harvest into compliance with the allocation percentage goals and make recommendations to the Commissioner.

8) Allocation percentage goals will be long term.

**Rationale:** It is recognized that survival rates can vary considerably within and among enhancement projects throughout S.E. Alaska. Also, variations in the management of the common property fisheries influence the harvest rates. The allocation percentage goals are not expected to be attained each year, but should be attained over the long term. Any change in the production takes two to five years to impact a fishery. Therefore, allocation percentage goals should be based on a minimum of five year increments (see number 9).

9) Overall contribution of revenue from salmon enhancement projects should be evaluated using the most recent five year average. Adjustments should be implemented only after discrepancies are determined to exist in the five year average for three consecutive years.

**Rationale:** See number 8 above. The distribution of enhanced fish is expected to vary widely from year to year. A five year rolling average was used because it constitutes a production cycle and levels year to year variation. It is recognized that a single abnormal year can change the five year average outside the range of the allocation percentage goals; therefore, the guidelines establish a three year period of consistent discrepancy before any change is made.

10) The joint RPT will evaluate current enhanced salmon production and the distribution of harvest revenues and update this on an annual basis.

- (A) Each facility should be evaluated after a minimum five years of operation to determine whether the 70% or 60% common property contribution, referred to in guiding principle 1A, is being achieved or to determine the realistic production and common property contribution for the facility.
- (B) The joint RPT will conduct an evaluation to determine when the allocation percentages are not being achieved and adjustments are necessary.
- (C) The joint RPT will recommend to the Commissioner adjustments to facilities’ annual operating plans as necessary to accomplish the desired allocation goal.

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**Rationale:** The SATF believes the joint RPT is the appropriate body to review the contribution data. The joint RPT is responsible for establishing and maintaining the comprehensive salmon plan, under the Commissioner’s authority, and is responsible for recommending the permit changes for production to the Commissioner.

- 11) Achieving these allocation percentage goals should not result in any modifications, in time or area, to the traditional “wildstock” fisheries. Minor modification may be considered to allow experimental or test fisheries that would not adversely impact wildstocks.

**Rationale:** The SATF strongly believed that the common property fisheries for wildstocks should not be manipulated in order to achieve the allocation percentage goals. However, this is not intended to preclude experimental or test fisheries, special hatchery access fisheries, or the establishment of new special harvest areas in order to access enhanced fish. For example, this could include the June troll fisheries for Chinook, or late season openings, or other special openings used to target enhanced fish as long as wildstocks are not adversely impacted. It is recommended that the department allow targeted fisheries on enhanced stocks when they will not adversely impact sustained yield of wildstocks. The department should work closely with hatchery operators in establishing these fisheries, keeping in mind the 70% and 60% contribution goals. The harvest of enhanced salmon in a targeted wildstock fishery is considered incidental to the harvest of wild stocks.

- 12) There should be no inseason changes in management of enhanced salmon in or out of the special harvest areas to achieve the allocation percentage goals.

**Rationale:** These guidelines are established to reach long term allocation percentages. Inseason common property fisheries adjustments should not be considered to meet allocation goals. No adjustment of wildstock fisheries should be allowed in order to meet the allocation percentage goals.

- 13) When adjustments are deemed necessary to the distribution of the harvest to meet allocation percentage goals, the following tools should be used: (1) special harvest area management adjustments; (2) new enhanced salmon production; and (3) modification of enhancement projects production, including remote releases. Hidden Falls shall remain a seine/troll terminal harvest area (Consistent with 5 AAC 33.374).

(A) The joint RPT will make appropriate recommendations through the Commissioner to facility(s) annual operating plan(s) to attain allocation goals.

(B) Facilities may request changes in operating plans to meet allocation requirements.

**Rationale:** New production and facility modifications to meet the allocation percentage goals are long term changes and will take five to ten years to have an impact. Changes in special harvest areas can be used in the short term to help modify any imbalances that occur.

For example, special harvest areas can be designated to only one gear group or the fishing time allowed to different gear groups could be adjusted. The effectiveness of this will also be contingent on the gear type and the targeted species. The SATF expects these adjustments will be reviewed by the joint RPT, and the joint RPT will make recommendations to the Commissioner as to the most appropriate action needed to achieve the allocation percentage goals. It is anticipated that short term solutions such as special harvest area management adjustments will only be used until decisions concerning long term adjustments can take effect. The allocation percentage goals will also be considered when reviewing permit alteration requests. If new production is not feasible or desirable, changes in remote releases can include new sites, change in species composition, change in the numbers of salmon released, or a combination of these.

(14) The allocative percentages will be:

Note: The following percentages refer to the total value (nominal dollars) of enhanced salmon. These percentages are not intended to apply to wildstock allocations.

Seine – 44% to 49%

Troll – 27% to 32%

Gillnet – 24% to 29%

Industry Consensus 12/8/11

The troll fleet continues to be below its target range; the seine fleet is below its target range; the gillnet fleet above its target range, based on the five year rolling averages calculated and finalized by ADF&G for the seasons up to and including 2009. Although the numbers for 2010 are preliminary and for 2011 very preliminary, it appears there has been movement in the right direction for the troll fleet, probably caused by their additional chum harvests outside of Neets Bay and at Homeshore; and for the seine fleet the movement has been in the wrong direction, probably largely explained by poor survivals at Hidden Falls and Deep Inlet and good survivals at DIPAC facilities.

In recognition of the imbalance and the long-term trends in the distribution of enhanced fish the JRPT recommends to the Board of Fisheries and to the commissioner:

Supporting the USAG and SEAS agreement (signed copy attached) regarding the following board of Fish proposals related to enhanced salmon allocation plan as follows:

- Proposal #295 (modify gillnet fishing in Zimovia Strait) JRPT recommends no action as proposal is being withdrawn.
- Proposal #323 (remove PNP's production from allocation plan) JRPT recommends no action as proposal is being withdrawn.
- Proposal #324 (create separate allocation plans for southern and northern southeast Alaska) JRPT recommends no action as the proposal is being withdrawn.
- Proposal #331. The JRPT is not in unanimous support of the proposal as written. But, the JRPT unanimously supports modification of Neets Bay SHA management as follows: If #331 is not adopted the associations (SEAS & USAG) will jointly request a modification to the current Neets Bay regulation 5AAC 33.370(b) 2 (A) which would delete [THE FIRST OPENING MUST BE FOR GILLNETS]; and ask the JRPT to support this modification, and, if this proposed modification is adopted, recommending to SSRAA that during any late summer or fall net rotation the net fleet below its range would have first start. If #331 is adopted SEAS and USAG will recommend to the SSRAA board continuing the current opening time ratios and rotations in the chinook and early summer chum portions of Neets Bay management and adding at least one more rotation; and continuing the 1-to-1 ratio in any late summer and fall net rotations with the net fleet below its range having first start.
- Proposal #332 (ties Neets Bay opportunities to status of allocation plan) JRPT recommends no action as proposal is being withdrawn.
- Proposal #334 (continue 1-to 1-ratios at Anita Bay) The JRPT recommends support of their proposal with changing the sunset date to 2014 instead of 2017.

- Proposal #335 (continue 1-to 1-ratios at Deep Inlet) The JRPT recommends support of their proposal with changing the sunset date to 2014 instead of 2017.
- Proposal #336 (reestablish rotational fisheries at Nakat) The JRPT recommends no action as proposal is being withdrawn.

In addition the JRPT recommends to the Commissioner:

- Supporting SSRAA's efforts to increase commercial fishing opportunities on salmon released at Neets Bay.

In addition the JRPT makes recommendations on the following Board of Fisheries proposals that affect the Southeast Enhanced Salmon Allocation Plan:

- Proposal #315 (extend coho season to 9/30 in Behm Canal) The JRPT supports extending the coho season to Sept 30<sup>th</sup> in a portion of Behm Canal to allow additional opportunity on returning enhanced coho to SSRAA.
- Proposal #344 (changing lines at Deep Inlet in May and June). The JRPT recommends support as it would increase troll opportunities on Chinook.
- Proposal #340 (changing lines at Anita Bay) JRPT recommends support of this proposal. This should improve the quality of enhanced salmon harvested at Anita Bay with minimal impact on salmon enhanced allocation plan.
- Proposal #308 (allow six trolling line in inside waters) Consensus that no action should be taken on this proposal for six troll lines as the proposer is withdrawing the proposal.
- Proposal #311 (troll coho retention to June 1 from June 15) JRPT recommends support of coho retention by the troll fleet starting June 1.
- Proposal #325 (chum hatchery access to trolling in June in sub-districts of districts 9, 12, and 14) The JRPT conditionally supports the proposal with the following recommendations: that section (iii) District 9 and sub-district 114-50 is withdrawn from the proposal, and that the proposal sunsets in 3 years; and that a chum salmon management plan is developed in that three year period. It is expected that the proposed management plan is brought back to the JRPT for review and possible submittal as a BOF proposal for the next cycle. This proposal could help the troll fleet who is below their allocated range of enhanced stocks. Since this fishery would be expanding into new areas and amount of effort there are concerns about the composition of stocks that will be harvested and effects on other fisheries.
- Proposal #338 (SSRAA proposal for Kendrick Bay THA) The JRPT has consensus to support this proposal. This proposal adjusts the THA to reflect planned releases in McLean Arm.

- Proposal #343 (ADFG housekeeping proposal so that EO doesn't have to be issued every year for the coho fishery in the THA during the general season coho closure) The JRPT recommends modifications to this ADFG proposal that allows coho retention from June 1<sup>st</sup> to September 30<sup>th</sup>. The August 1<sup>st</sup> date would prevent harvest of coho in a THA that releases coho when trollers can keep coho during the general opening of the summer season. Coho have historically been able to be kept during June 15<sup>th</sup> to Aug 1<sup>st</sup> so no wild stock concerns exist.

The JRPT recognizes that it is necessary to tread carefully in making adjustments to production or to SHA management. Fisheries and community activities develop around hatchery opportunities, and future survivals and market condition are difficult to predict. At the same time, the system needs to respond to the guidelines of the allocation plan by working towards providing fair opportunities for the fleets.

The following Associations and individuals were present in the room and did not object to the following industry consensus points in this document that the RPT voted on:

- Alaska Trollers Association
- Chum Trollers Association
- Southeast Alaska Seiners Association
- Southeast Alaska Fishermen's Alliance
- United Southeast Gillnetters Association

Linda Danner, Eric Jordan, Ryan Wilson, Carl Peterson, Matt Stroemer, Matt Donohoe, Tad Fujioka, Doug Rendle, Dave Otte, Alan Anderson Bill Auger, Arnold Enge, Richard Eliason, Cheyne Blough, Chris Guggenbickler, Rudy Franulovich, Ed Hansen, Kathy Hansen, Bob Thorstenson, Roger Ingman, John Peckham, Mitch Eide, Doug Chaney, Lauch Leach, Nik Nebl, Allen Jacklet, and Bruce Wallace

Letter of Agreement

United Southeast Alaska Gillnetters (USAG) and Southeast Alaska Seiners (SEAS)


December 8, 2011

In the interest of cooperation and to facilitate a productive Board of Fisheries meeting the United Southeast Alaska Gillnetters (USAG) and Southeast Seiners Association (SEAS) agree to the following;.

1. USAG agrees to withdraw BOF proposals: 289, 296, 297, 298, 323,324 and 333 previously submitted to the Alaska Board of Fisheries for the 2011/2012 cycle in Southeast Alaska
2. SEAS agrees to withdraw BOF proposals: 290, 291, 295, 332, and 336 previously submitted to the Alaska Board of Fisheries for the 2011/2012 cycle in Southeast Alaska
3. Both SEAS and USAG will ask the JRPT to amend proposals 334 (Anita Bay THA) and 335 (Deep Inlet THA) in order to change the year of sunset of the 1-to-1 ratios to 2014.
- 4) USAG and SEAS agree to support modification of Neets Bay SHA management as follows: If #331 is not adopted the associations will jointly request a modification to the current Neets Bay regulation 5AAC 33.370(b) 2 (A) which would delete [THE FIRST OPENING MUST BE FOR GILLNETS]; and ask the JRPT to support this modification, and, if this proposed modification is adopted, recommending to SSRAA that during any late summer or fall net rotation the net fleet below its range go first. If #331 is adopted SEAS and USAG will recommend to the SSRAA board continuing the current opening time ratios and rotations in the chinook and early summer chum portions of Neets Bay management and adding at least one more rotation; and continuing the 1-to-1 ratio in any late summer and fall net rotations with the net fleet below its range going first.
5. SEAS and USAG will simultaneously deliver letters to the Alaska Board of Fisheries before January 1, 2012 to provide official notification of withdrawal of the proposals indicated in paragraphs 1 and 2 above.

  
Bill Auger, President

USAG

  
Robert Thorstenson, Jr., Executive Director

SEAS